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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/549,423	09/15/2005	Hidekazu Suzuki	MAT-8749US	9468
53473	7590	04/29/2011	EXAMINER	
RATNERPRESTIA P.O. BOX 980 VALLEY FORGE, PA 19482			MCNALLY, MICHAEL S	
			ART UNIT	PAPER NUMBER
			2436	
			MAIL DATE	DELIVERY MODE
			04/20/2011	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/549,423

Applicant(s)

SUZUKI, HIDEKAZU

Examiner

Michael S. McNally

Art Unit

2436

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 January 2011.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 4-6, 9, 12-14 and 17-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 4-6, 9, 12-14 and 17-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-840)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB-08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. Claims 1, 4-6, 9, 12-14 and 17-20 are presented for examination.
2. Claims 1, 9 and 17-20 are amended.

Continued Examination Under 37 CFR 1.114

3. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 21 January 2011 has been entered.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.

4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
6. **Claims 1, 5, 9, 13, and 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Application Publication No. 2002/0007346 to *Qiu et al.* in view of US. Patent No. 7,225,164 to *Candelore et al.* and in view of U.S. Patent Application Publication No. 2006/0020784 to *Jonker et al.***

As to **claim 1**, *Qiu* discloses a revocation information transmission method used in a system including a plurality of transceiver devices for transmitting and receiving contents through a network (*Qiu*: 110, 120, 130, 140 – Fig 1; Page 2, Sec 29-31; Hubs 1-4 receive information from other hubs and transmits data to own users; hubs include CA and CRLs), and a plurality of reproduction devices for reproducing the received contents (*Qiu*: 112-114, 123-125, 134-136, 145-147 – Fig 1; Page 2, Sec 29-31; end users who receive data), the method comprising the steps of:

executing, by the transceiver devices, authentication of the plurality of reproduction devices, respectively, where each of the transceiver devices reads authentication information of a respective one of the reproduction devices (*Qui*: Page 4-5, Sec 54-55; individual CA's authenticate individual end users);

individually uploading, from each of the transceiver devices through the network to a revocation integrator device, revocation information indicating an authentication failure of a respective one of the individual reproduction devices (*Qui*: Page 1-2, Sec 9 and Page 4, Sec 52; master CRL maintained by the trust bridge) ;

integrating, by the revocation integrator device, the revocation information uploaded from each of the transceiver devices, as an integrated revocation list

representing a common list of revocation information for each of the reproduction devices (*Qui*: Page 1-2, Sec 9 and Page 4, Sec 52; master CRL maintained by the trust bridge).

Qui does not expressly disclose packetizing the integrated revocation list and multiplexing the packetized revocation list into a stream; and

transmitting the stream to the transceiver devices on the network;

wherein each transceiver device utilizes, in the common list, other revocation information from other transceiver devices that previously uploaded revocation information to the revocation integrator device to:

a) deny unauthorized reproduction devices from reproducing the content when the unauthorized devices are included in the common list, and

b) allow authorized reproduction devices to reproduce the content when the authorized reproduction devices are not included in the common list.

Candelore discloses packetizing the integrated revocation list and multiplexing the packetized revocation list into a stream (*Candelore*: Col 6 , Line 42- Col 7, Line10; CRL transported in an MPEG PSI data structure); and

transmitting the stream to the transceiver devices on the network (*Candelore*: Col 6 , Line 42- Col 7, Line10; CRL transported in an MPEG PSI data structure).

Jonker discloses wherein each transceiver device utilizes, in the common list, other revocation information from other transceiver devices that previously uploaded revocation information to the revocation integrator device (*Jonker*: Page 4, Sec 67-71] to:

a) deny unauthorized reproduction devices from reproducing the content when the unauthorized devices are included in the common list (Jonker: Page 4, Sec 67-71;), and

b) allow authorized reproduction devices to reproduce the content when the authorized reproduction devices are not included in the common list (Jonker: Page 4, Sec 67-71).

Qui, Candalore and *Jonker* are analogous art because they are from the common area of device revocation.

At the time of invention, it would have been obvious to a person of ordinary skill in the art to transport revocation information on an MPEG transport stream. The rationale would have been to allow the system to work with an MPEG decoder (*Candalore*: Col 3, Lines 21-33). Furthermore, at the time of the invention, it would have been obvious to use a common list of revocation information to allow and deny devices on the network. The rationale would have been to have centralized content distribution control (*Jonker*: Page 1, Sec 16).

As to **claim 5**, the modified *Qui/Candalore/Jonker* reference further discloses wherein the stream is an MPEG transport stream, and the integrated revocation list is transmitted by using a payload of a transport packet of the MPEG transport stream (*Candalore*: Col 6, Line 42- Col 7, Line10; CRL transported in an MPEG PSI data structure).

As to **claim 9**, the modified *Qui/Candalore/Jonker* reference further discloses a revocation information transmitting system comprising:

a plurality of transceiver devices for transmitting and receiving contents through a network (*Qui*: 110, 120, 130, 140 – Fig 1; Page 2, Sec 29-31; Hubs 1-4 receive information from other hubs and transmits data to own users; hubs include CA and CRLs);

a plurality of reproduction devices for reproducing the received contents (*Qui*: 112-114, 123-125, 134-136, 145-147 – Fig 1; Page 2, Sec 29-31; end users who receive data);

wherein the transceiver devices include:

a first digital interface for outputting a compressed/expanded digital signal to the reproduction devices (*Candelore*: Col 6, Line 42- Col 7, Line10; CRL transported in an MPEG PSI data structure),;

a second digital interface for receiving authentication information from the reproduction devices (*Candelore*: Col 6, Line 42- Col 7, Line10; CRL transported in an MPEG PSI data structure);

a revocation integrator device on the network for receiving revocation information uploaded from the plurality of transceiver devices indicating an authentication failure of a respective one of the reproduction devices (*Qui*: Page 1-2, Sec 9 and Page 4, Sec 52; master CRL maintained by the trust bridge);

the revocation integrator device integrating the revocation information received from the reproduction devices, as an integrated revocation list representing a common list of revocation information for each of the reproduction devices (*Qui*: Page 1-2, Sec 9 and Page 4, Sec 52; master CRL maintained by the trust bridge);

a multiplexer that multiplexes the integrated revocation list integrated by the integrator and multiplexes it into a stream (*Candelore*: Col 6 , Line 42- Col 7, Line10; CRL transported in an MPEG PSI data structure); and

a transmitter that transmits the stream (*Candelore*: Col 6 , Line 42- Col 7, Line10; CRL transported in an MPEG PSI data structure);

wherein the stream is an MPEG transport stream, and the integrated revocation list is transmitted by using a data structure of a section of the MPEG transport stream (*Candelore*: Col 6 , Line 42- Col 7, Line10; CRL transported in an MPEG PSI data structure), and

wherein each transceiver device utilizes, in the common list, other revocation information from other transceiver devices that previously uploaded revocation information to the revocation integrator device. (*Jonker*: Page 4, Sec 67-71) to:

a) deny unauthorized reproduction devices from reproducing the content when the unauthorized devices are included in the common list (*Jonker*: Page 4, Sec 67-71),
and

b) allow authorized reproduction devices to reproduce the content when the authorized reproduction devices are not included in the common list (*Jonker*: Page 4, Sec 67-71).

As to **claim 13**, the modified *Qui/Candelore/Jonker* reference further discloses wherein the stream is an MPEG transport stream, and the integrated revocation information is transmitted by using a payload of a transport packet of the MPEG

transport stream (*Candalore*: Col 6 , Line 42- Col 7, Line10; CRL transported in an MPEG PSI data structure).

As to **claim 17**, the modified *Qui/Candalore/Jonker* reference discloses a revocation information transmission method including a plurality of transceiver devices for transmitting and receiving contents through a network (*Qui*: 110, 120, 130, 140 – Fig 1; Page 2, Sec 29-31; Hubs 1-4 receive information from other hubs and transmits data to own users; hubs include CA and CRLs), and a plurality of reproduction devices for reproducing the received contents (*Qui*: 112-114, 123-125, 134-136, 145-147 – Fig 1; Page 2, Sec 29-31; end users who receive data), the method comprising the steps of: executing, by the transceiver devices, authentication of the reproduction devices, by reading authentication information of the reproduction devices through a first digital interface (*Qui*: Page 4-5, Sec 54-55; individual CA's authenticate individual end users); uploading, by the transceiver devices, to a revocation integrator device, revocation information of an authentication failure of the reproduction devices (*Qui*: Page 1-2, Sec 9 and Page 4, Sec 52; master CRL maintained by the trust bridge); and integrating, by the revocation integrator device, the revocation information uploaded from each of the transceiver devices as an integrated revocation list representing a common list of revocation information for each of the reproduction devices (*Qui*: Page 1-2, Sec 9 and Page 4, Sec 52; master CRL maintained by the trust bridge),

wherein the integrated revocation list is transmitted from the revocation integrator to the transceiver devices using a data structure of a section of an MPEG transport

stream (*Candelore*: Col 6 , Line 42- Col 7, Line10; CRL transported in an MPEG PSI data structure),

wherein each transceiver device utilizes, in the common list, other revocation information from other transceiver devices that previously uploaded revocation information to the revocation integrator device. (*Jonker*: Page 4, Sec 67-71) to:

a) deny unauthorized reproduction devices from reproducing the content when the unauthorized devices are included in the common list (*Jonker*: Page 4, Sec 67-71),
and

b) allow authorized reproduction devices to reproduce the content when the authorized reproduction devices are not included in the common list (*Jonker*: Page 4, Sec 67-71).

As to **claim 18**, the modified *Qui/Candelore/Jonker* reference discloses a revocation information managing apparatus for use with a plurality of transceiver devices, connected to a network for transmitting and receiving contents (*Qui*: 110, 120, 130, 140 – Fig 1; Page 2, Sec 29-31; Hubs 1-4 receive information from other hubs and transmits data to own users; hubs include CA and CRLs) between a plurality of reproduction devices for reproducing the received contents (*Qui*: 112-114, 123-125, 134-136, 145-147 – Fig 1; Page 2, Sec 29-31; end users who receive data), the managing apparatus including:

a first digital interface for outputting a compressed/expanded digital signal from the transceiver devices to the reproduction devices. (*Candelore*: Col 6 , Line 42- Col 7, Line10; CRL transported in an MPEG PSI data structure);

a second digital interface for receiving authentication information from the reproduction devices (*Candelore*: Col 6 , Line 42- Col 7, Line10; CRL transported in an MPEG PSI data structure);

an output for uploading, to a revocation integrator device, revocation information of an authentication failure of the reproduction devices (*Qui*: Page 1-2, Sec 9 and Page 4, Sec 52; master CRL maintained by the trust bridge); and

a receiver for receiving an integrated revocation list from the revocation integrator device, the integrated revocation list representing a common list of revocation information for each of the reproduction devices (*Qui*: Page 1-2, Sec 9 and Page 4, Sec 52; master CRL maintained by the trust bridge),

wherein the integrated revocation list is transmitted from the revocation integrator device to the transceiver devices using a data structure of a section of an MPEG transport stream (*Candelore*: Col 6 , Line 42- Col 7, Line10; CRL transported in an MPEG PSI data structure), and

wherein each transceiver device utilizes, in the common list, other revocation information from other transceiver devices that previously uploaded revocation information to the revocation integrator device (*Jonker*: Page 4, Sec 67-71) to;

a) deny unauthorized reproduction devices from reproducing the content when the unauthorized devices are included in the common list (*Jonker*: Page 4, Sec 67-71), and

b) allow authorized reproduction devices to reproduce the content when the authorized reproduction devices are not included in the common list (Jonker: Page 4, Sec 67-71).

As to **claim 19**, the modified *Qui/Candelore/Jonker* reference further discloses wherein:

one of the transceiver devices, as a first transceiver device includes a first digital interface for outputting a compressed/expanded digital signal to a respective one of the reproduction devices, as a first reproduction device and a second digital interface for executing the mutual authentication between the first transceiver device and the first reproduction device (*Candelore*: Col 6 , Line 42- Col 7, Line10; CRL transported in an MPEG PSI data structure), the method further comprising:

receiving the stream by the first transceiver device (*Candelore*: Col 6 , Line 42- Col 7, Line10; CRL transported in an MPEG PSI data structure),; and

selectively outputting, via the first digital interface of the first transceiver device, the compressed/expanded digital signal to the first reproduction device responsive to the integrated revocation list received in the stream (*Candelore*: Col 6 , Line 42- Col 7, Line10; CRL transported in an MPEG PSI data structure).

7. Claims 4 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Application Publication No. 2002/0007346 to *Qiu et al.* in view of US. Patent No. 7,225,164 to *Candelore et al.* and in view of U.S. Patent Application Publication No. 2006/0020784 to *Jonker et al.* further in view of U.S. Patent Application Publication No. 2004/0054892 by *Ji et al.*

As to **claims 4 and 12**, the modified *Qui/Candelore/Jonker* reference discloses all recited elements of claims 1 and 9 from which claims 4 and 12 depend. The modified reference further discloses wherein the stream is an MPEG transport stream (*Candelore*: Col 6 , Line 42- Col 7, Line10; CRL transported in an MPEG PSI data structure),

The modified reference does not expressly disclose the integrated revocation list is transmitted by using a data structure of a PES packet of the MPEG transport stream.

Ji discloses the integrated revocation list is transmitted by using a data structure of a PES packet of the MPEG transport stream (*Ji*: Page 2, Sec 27, 35).

The modified reference and *Ji* are analogous art because they are from the common area of data transmission and protection.

At the time of invention, it would have been obvious to a person of ordinary skill in the art to transmit control information in a PES packet of the MPEG transport stream. The rationale would have been to link the control data to the playback information (*Ji*: Page 2, Sec 34).

8. Claims 6 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Application Publication No. 2002/0007346 to *Qiu et al.* in view of U.S. Patent No. 7,225,164 to *Candelore et al.* and in view of U.S. Patent Application Publication No. 2006/0020784 to *Jonker et al.* further in view of U.S. Patent No. 5,692,124 by *Holden et al.*

As to **claims 6 and 14**, the modified *Qui/Candelore/Jonker* reference discloses all recited elements of claims 1 and 9 from which claims 6 and 14 depend.

The modified reference does not expressly disclose wherein the integrated revocation list is transmitted by using an IP packet.

Holden discloses wherein the integrated revocation list is transmitted by using an IP packet (*Holden*: Col 18, Lines 30-38).

The modified reference and *Holden* are analogous art because they are from the common area of data transmission and protection.

At the time of invention, it would have been obvious to a person of ordinary skill in the art to transmit revocation data in an IP packet. The rationale would have been to allow for transfer over a TCP/IP network.

9. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Application Publication No. 2002/0007346 to *Qiu et al.* in view of U.S. Patent No. 7,225,164 to *Candelore et al.* and in view of U.S. Patent Application Publication No. 2006/0020784 to *Jonker et al.* further in view of U.S. Patent Application Publication No. 2004/0054892 by *Ji et al.* further in view of U.S. Patent No. 5,692,124 by *Holden et al.*

As to **claim 20**, the modified *Qui/Candelore/Jonker/Ji* reference discloses a revocation information transmission method used in a system including a plurality of transceiver devices for transmitting and receiving contents through a network (*Qiu*: 110, 120, 130, 140 – Fig 1; Page 2, Sec 29-31; Hubs 1-4 receive information from other hubs and transmits data to own users; hubs include CA and CRLs), and a plurality of

reproduction devices for reproducing the received contents (*Qui*: 112-114, 123-125, 134-136, 145-147 – Fig 1; Page 2, Sec 29-31; end users who receive data), the method comprising the steps of:

executing, by the transceiver devices, authentication of the reproduction devices, respectively, where each of the transceiver devices reads authentication information of a respective one of the reproduction devices (*Qui*: Page 4-5, Sec 54-55; individual CA's authenticate individual end users);

individually uploading, from each of the transceiver devices through the network to a revocation integrator device, revocation information indicating an authentication failure of a respective one of the individual reproduction devices (*Qui*: Page 1-2, Sec 9 and Page 4, Sec 52; master CRL maintained by the trust bridge) ;

integrating, by the revocation integrator device, the revocation information uploaded from each of the transceiver devices, as an integrated revocation list representing a common list of revocation information for each of the reproduction devices (*Qui*: Page 1-2, Sec 9 and Page 4, Sec 52; master CRL maintained by the trust bridge);

packetizing the integrated revocation list and multiplexing the packetized revocation list into a stream (*Candelore*: Col 6 , Line 42- Col 7, Line10; CRL transported in an MPEG PSI data structure); and

transmitting the stream to the transceiver devices on the network (*Candelore*: Col 6 , Line 42- Col 7, Line10; CRL transported in an MPEG PSI data structure);

wherein the stream is an MPEG transport stream (*Candalore*: Col 6 , Line 42- Col 7, Line10; CRL transported in an MPEG PSI data structure), and the integrated revocation list is

1) transmitted by using a data structure of a section of the MPEG transport stream (*Candalore*: Col 6 , Line 42- Col 7, Line10; CRL transported in an MPEG PSI data structure),

2) transmitted by using a payload of transport packet of the MPEG transport stream (*Ji*: Page 2, Sec 27, 35),

wherein each transceiver device utilizes, in the common list, other revocation information from other transceiver devices that previously uploaded revocation information to the revocation integrator device (*Jonker*: Page 4, Sec 67-71) to:

a) deny unauthorized reproduction devices from reproducing the content when the unauthorized devices are included in the common list (*Jonker*: Page 4, Sec 67-71;) , and

b) allow authorized reproduction devices to reproduce the content when the authorized reproduction devices are not included in the common list (*Jonker*: Page 4, Sec 67-71).

The modified reference does not expressly disclose wherein the integrated revocation list is transmitted by using an IP packet.

Holden discloses wherein the integrated revocation list is transmitted by using an IP packet (*Holden*: Col 18, Lines 30-38).

The modified reference and *Holden* are analogous art because they are from the common area of data transmission and protection.

At the time of invention, it would have been obvious to a person of ordinary skill in the art to transmit revocation data in an IP packet. The rationale would have been to allow for transfer over a TCP/IP network.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael S. McNally whose telephone number is (571)270-1599. The examiner can normally be reached on Monday through Friday 9:00 - 5:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nasser Moazzami can be reached on (571)272-4195. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Michael S McNally/
Examiner, Art Unit 2436
18 April 2011